A Monthly Bulletin on Epidemiology & Public Health Practice in Washington State

epi TRENDS

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In This Issue:

Consumers and Clinicians Should Be Alert to Risks of Food-borne Illness from Shellfish

Risk of food-borne illness from shellfish is a continuing public health concern, particularly during the summer months. Prevention is a challenge because cases are rare and shellfish toxins, unlike viruses and bacteria, are heat-stable and cannot be eliminated by cooking.

The Department of Health's Shellfish Program routinely monitors human illness reports and shellfish biotoxin levels. All commercial shellfish growing areas in Washington participate in monitoring. The State Public Health Laboratories test shellfish for toxins. The Marine Biotoxin Hotline lists beaches that are closed to the harvest of specific species of shellfish.

Paralytic Shellfish Poisoning

Toxins from naturally occurring microscopic organisms concentrated in shellfish can cause paralytic shellfish poisoning (PSP). The symptoms of PSP intoxication vary depending on the type, amount, and retention of toxins in the body. The first symptoms are likely to be tingling and numbness, initially around the lips and mouth and then spreading to adjoining parts of the face and neck. Other frequent symptoms are a prickly sensation in the fingertips and toes, mild headache, and dizziness.

In moderately severe poisoning the arms and legs may be involved. Other symptoms can include giddiness, incoherent speech, and a sensation of floating accompanied by loss of coordination. Respiratory paralysis can be life threatening and necessitate hospitalization for intensive care. No effective antidote is available for PSP toxins. A diagnosis of PSP is based chiefly on a history of eating certain seafood items shortly before the characteristic physical symptoms appear.

DOH
Marine Biotoxin
H O T L I N E
1-800-562-5632

Shellfish Program
1-360-753-5992

Amnesic Shellfish Poisoning

Amnesic shellfish poisoning (ASP) is caused by shellfish contaminated with domoic acid concentrated from marine organisms. Gastrointestinal symptoms such as vomiting, nausea, diarrhea, and abdominal cramps may occur within 24 hours of ingestion. In more severe cases, neurological symptoms may develop within 48 hours and may include headache, dizziness, confusion, difficulty breathing, short-term memory loss, seizures, and possibly death. This poison has no known antidote and the loss of short-term memory is not reversible. As with PSP, diagnosis depends on history and symptoms.

Vibrio Infections

Infections can occur after eating raw shellfish that carry naturally occurring bacteria. Cases of Vibrio parahaemolyticus, which causes cramps and watery diarrhea but rarely severe illness, are reported annually in Washington. A related organism, Vibrio vulnificus, is found in raw oysters from warm coastal areas of the United States. Symptoms include fever, nausea, and vomiting; severe blood stream infections can be fatal. Consumption of raw shellfish is not advisable for persons with immune disorders, liver disease (chronic alcohol use or hepatitis), cancer, diabetes, or long-term steroid use. Cooking will kill Vibrio bacteria.

8.96

Immunization Goal Is 90% Coverage for 2-Year Olds

A survey conducted by the Centers for Disease Control and Prevention (CDC) has estimated that 75% of Washington State children aged 19–35 months have received the recommended vaccination coverage (table). Although this percentage is similar to that for the United States as a whole and was the highest among nine far western states (which ranged from 66% to 74%), it still falls short of the goal of 90% coverage for this age group proposed in the Healthy People 2000 report issued in 1990 by the U.S. Public Health Service.

The National Immunization Survey conducted by the CDC from July 1994 through June 1995 provided national, state, and selected urban area estimates of vaccination coverage for four doses of diphtheria and tetanus toxoid and pertussis vaccine, three doses of poliovirus vaccine, and one dose of measles, mumps, and rubella vaccine (4:3:1).

In Washington State the Department of Health is working to increase childhood vaccination coverage through support of immunization activities of local health jurisdictions and the Community Migrant Health Center, and through the provision of free, publicly funded vaccine. In conjunction with the Immunization Action Coalition of Washington State, the department is conducting an Immunization Awareness Campaign to improve public knowledge and demand for vaccinations. The department also is sponsoring demonstration projects at WIC (Women, Infant, Children) clinics to assess immunization status of clients and make appropriate referrals. In addition, the department is beginning a provider education campaign to encourage use of all clinical encounters, including emergency room visits, hospitalizations, and subspecialty clinic visits to screen children for immunizaiton status and provide needed vaccines.

Measles Exposure at Sea-Tac Airport

A 14-year-old boy who traveled to Seattle from Germany on July 31 has been diagnosed with measles. Travelers may be at risk if they were at Sea-Tac Airport around 9–10 pm on July 31 or if they traveled on the following flights on that date: United Airlines #2053 from San Francisco to Seattle or Lufthansa Airlines #1528 from Dusseldorf to San Francisco. If you have questions or concerns about this case, please contact your local health department.

E. coli Epidemics in Japan Traced to School Lunches

Major epidemics of Escherichia coli O157:H7 infection have sickened more than 9,000 Japanese, primarily schoolchildren, and eight deaths have been reported. At least three different DNA patterns were found among the Japanese E. coli O157:H7 isolates. Radish and lettuce served in school lunches are suspect sources. The Centers for Disease Control and Prevention is assisting in the investigation.

E. coli O157:H7 is a bacterial infection typically associated with consuming food or water contaminated with cattle feces. Meat such as ground beef is a common source of exposure, but other items implicated in past cases include dry cured salami, venison, lettuce, and swimming water. To prevent infection it is important to completely cook raw meat and poultry, and to avoid contaminating cooking utencils or other food with raw meat or poultry juices.

TABLE: Preliminary estimates for percentage of vaccination coverage among children aged 19–35 months; National Immunization Survey, July 1994 – June 1995

	Percent Coverage						
Area	4:3:1*	3+ DPT†	4+ DTP§	3+ Polio	MMR¶	3+ Hib#	3+ Hep BÐ
King County	80±4.9	96±2.5	83±4.6	87±4.2	91±3.5	91±3.9	58±6.4
Rest of State	73±5.5	92±3.4	77±5.3	82±4.9	86±4.4	89±4.1	43±5.9
Washington Total	75±4.2	93±2.5	79±4.0	84±3.7	88±3.3	89±3.1	47±4.5
U.S. Total	75±1.0	94±0.5	78±1.0	86±0.8	89±0.7	91±0.7	51±1.1

*Four doses of diphtheria and tetanus toxoids and pertussis vaccine (DPT); three doses of poliovirus
†Three or more doses of DPT
§Four doses of DPT
¶One or more doses of measles, mumps, and rubella vaccine (MMR)
#Three or more doses of hemophilus influenza type b vaccine
ÐThree or more doses of hepatitis B vaccine

Monthly Surveillance Data by County

July 1996* – Washington State Department of Health

County	**Campylobacter**	Giardia	Hepatitis A	Hepatitis B	E. coli O157:H7	Salmonella	Shigella	Meningococcal Disease	Tuberculosis	AIDS†	Gonorrhea	Syphilis	Pesticides§	Lead¶
Adams	1	0	1	0	0	0	0	0	0	0	0	0	6	0/12
Asotin	0	0	12	0	0	0	0	0	0	0	0	0	0	0/0
Benton	3	1	0	1	0	1	0	0	0	0	1	1	1	0/3
Chelan	1	0	0	0	0	1	0	0	0	0	0	0	6	7/96
Clallam	0	0	0	0	0	2	0	0	1	0	1	0	0	0/0
Clark	8	0	0	1	0	3	1	3	0	1/3	5	1	1	0/5
Columbia	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Cowlitz	1	0	0	0	0	0	0	0	0	0	1	1	0	0/3
Douglas	0	0	0	0	0	0	0	0	0	0	1	0	1	1/17
Ferry	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Franklin	0	0	0	0	0	1	0	0	1	0	2	0	6	0/0
Garfield	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Grant	0	0	0	0	0	0	0	0	0	0	1	0	6	0/3
Grays Harbor	2	4	1	0	0	2	0	0	0	0	1	0	0	0/0
Island	0	0	0	0	0	0	0	0	2	1#	0	0	0	0/2
Jefferson	0	3	0	0	0	2	0	0	0	0	0	0	0	0/0
King	27	8	7	0	5	26	4	3	10	37/23	94	3	3	1/91
Kitsap	11	1	5	1	2	5	1	0	0	0/5	11	0	1	2/39
Kittitas	0	1	0	0	0	0	0	0	0	0	0	0	1	0/2
Klickitat	0	1	0	0	0	0	0	0	0	0	0	0	0	0/0
Lewis	3	0	0	0	0	0	0	1	0	0	0	0	3	0/2
Lincoln	0	0	0	0	0	0	0	0	0	0	0	0	1	0/0
Mason	0	0	3	1	0	0	0	0	0	0/1	1	0	0	0/2
Okanogan	1	0	0	0	0	0	1	0	0	0	2	0	7	0/0
Pacific	0	0	0	0	0	0	0	0	1	0	0	0	0	0/0
Pend Oreille	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Pierce	11	2	0	1	4	5	0	1	3	1/6	35	3	2	2/95
San Juan	0	0	1	0	0	0	0	0	0	0	0	0	1	0/0
Skagit	1	0	4	1	0	0	0	0	0	0	2	0	2	0/4
Skamania	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Snohomish	9	1	1	0	0	6	0	0	3	3/1	10	0	4	0/18
Spokane	15	1	0	0	0	4	1	0	0	0/4	5	0	2	0/32
Stevens	0	0	1	0	0	0	0	0	0	0	0	0	0	0/2
Thurston	4	0	1	0	0	3	0	0	0	0	3	0	2	0/10
Wahkiakum	0	0	0	0	0	0	0	0	0	0	0	0	0	0/0
Walla Walla	3	0	0	0	0	1	0	0	0	1/0	0	1	2	0/9
Whatcom	7	5	0	0	0	1	1	1	0	0/1	1	0	5	0/10
Whitman	0	0	0	0	0	0	0	0	0	0	1	0	0	0/5
Yakima	0	0	0	0	0	0	0	0	1	1/4	3	1	13	4/159
Unknown														0/12
Current Month	108	28	37	6	11	63	9	9	22	44/49	181	11	76	17/622
July 1995	130	57	70	15	11	78	39	8	25	80/57	202	20		21/261
1996 to date	520	252	319	59	29	334	116	63	153	401	1279	88		107/3007 **
1995 to date	507	361	429	104	49	310	208	66	159	578	1473	121		95/2130 ††

* Data are provisional based on reports received as of July 31, unless otherwise noted.

† When two numbers are given: June data / July data; 0 is no cases in June or July. #The July epiTRENDS contained an error; Island Co. had 0 cases in May.

§ Unconfirmed reports of illness associated with pesticide exposure.

¶ Number of elevated tests / total tests performed (not number of children tested); number of tests per county indicates county of health care provider, not county of residence for children tested.

** More than 500 previously missing laboratory reports were entered onto registry during May 1996.

†† Historical accounts of lead tests by county may have changed due to corrections in identifying the provider county.

Q&A

Q: *What is DOHNet and how do I access it?*

A: DOHNet is the Department of Health electronic bulletin board. It posts state, national, and international public health information. Access DOHNet via modem by dialing 360-753-4352. Connection parameters are maximum baud rate 9600, parity = none, data bits = 8, stop bits = 1.

Questions? Comments?
If you have a question about epidemiologic or public health issues, or a comment about epiTRENDS, contact the editors at the address on the mailing panel or by email at function@u.washington.edu

Mercury Poisoning Cases Traced to Face Cream

A face cream containing mercury has been linked to cases of mercury poisoning in Arizona, California, New Mexico, and Texas. The July 26, 1996 issue of Morbidity Mortality Weekly Report (MMWR 45:633-635) reports these cases and noted that close household contacts of persons using the cream also had elevated urine mercury levels. Chronic exposure to mercury can cause central nervous system damage.

The product associated with these mercury poisonings, Crema de Belleza-Manning, contained 6-10% mercury. The Food and Drug Administration restricts the use of mercury in cosmetics to 0.0065% by weight. The health departments in Arizona, California, New Mexico, and Texas have issued public warnings advising against continued use of this product. Another product, Nutrapiel Cremaning Plus, has recently been found to contain 9.7% mercury by weight. The Centers for Disease Control and Prevention conclude that "health education messages should emphasize the health risks of using any product containing calomel" (mercurous chloride). For a copy of the MMWR article consult the CDC home page (http//www.cdc.gov) or call Juliet Van Eenwyk at 360-705-6051.

Miniblinds: A Newly Identified Source of Lead Exposure

Miniblinds can present a lead poisoning hazard for young children according to a June 25 press release issued by the U.S. Consumer Product Safety Commission (CPSC). Twenty-five million nonglossy, vinyl miniblinds with lead added to stabilize the plastic are imported each year into the United States. Over time, sunlight deteriorates the plastic and lead dust forms on the surface of the blind. Testing miniblinds for lead dust is expensive. Thus, the CPSC recommends that households with children younger than six years of age replace any miniblinds with a nonleaded type. For a copy of the CPSC press release, please call 301-504-0580, ext. 1193.

Meetings & Courses

Sep 30-Oct 2	Building Partnerships for Health — Third Annual Washington State Joint Conference on Health, sponsored by the Washington State Public Health Association; Tacoma, WA. For information: George Hilton, Tel: 206-361-2891; Fax: 206-361-1111; email: gbh0303@hub.doh.wa.gov

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